

Environmental Protection in the Use of Mid-frequency Active Sonar Remains Issue Number One

GREETINGS, AND WELCOME to the spring 2009 issue of *Currents* magazine! Here's a shoutout of appreciation to the *Currents* staff, and to the many contributors to this publication from around the Navy. Your efforts help to enlighten and inspire Navy environmental protection professionals, leading to continually improving performance. Well done—and keep those article submissions coming!

Of particular interest in this issue is *Currents'* first-ever interview with a leader of a major environmental non-governmental organization (NGO). I am delighted to welcome Mr. Bob Barnes of The Nature Conservancy to the Navy environmental community, through his appearance in *Currents*. Having Bob speak with us is part of the Navy's effort to forge closer and more cooperative ties with the environmental NGO community, recognizing that NGOs play an important role in shaping U.S. environmental protection priorities. National defense and environmental protection are compatible and mutually supportive objectives. Improving Navy relationships with NGOs will assist in the achievement of both objectives.

Navy has worked hard to ensure that this critical training takes place in an environmentally responsible manner.

Key to the Navy's MFAS environmental compliance strategy is the preparation of environmental impact statements (EIS) and overseas environmental impact statements (OEIS) for the major Navy range and operating areas (OPAREA). Along with preparing EIS/OEIS documents, the Navy will seek any necessary authorizations, and conduct consultations with regulatory agencies, as required by various environmental statutes. Environmental processes for a few ranges and OPAREAs were initiated in the 1990s. By 2005, efforts were underway for 12 areas, with a thirteenth added in 2007. Throughout these years, the Navy worked closely with regulatory agencies, in particular the National Marine Fisheries Service (NMFS).



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This Outlook column will focus on the Navy's Number One environmental issue of the past several years: environmental protection in the use of mid-frequency active sonar (MFAS). In late 2008 and early 2009 substantial progress was made in this area, but much work remains to be done.

The continuing importance of MFAS to the Navy mission is readily apparent. Today dozens of countries operate quiet diesel-electric submarines. In relatively noisy littoral waters, where the Navy's presence is often required in support of national objectives, these submarines can be extremely difficult to detect without the use of MFAS. Continuous at-sea training with MFAS is necessary to maintain sonar operator, ship and multi-unit proficiency. This training is particularly important as units prepare to deploy to potential conflict areas around the globe. The

In early 2009, the environmental planning, authorization and consultation processes were completed for the first three of the 13 efforts underway. These areas, the Hawaii Range Complex (HRC), Southern California Range Complex (SOCAL) and the Atlantic Fleet Active Sonar Training (AFASST) area, collectively known as the "Big Three," represent roughly 75 percent of all sonar training that takes place on established ranges and OPAREAs worldwide. Extensive protective measures were established during these processes. Among these are posting lookouts trained in marine mammal observation, monitoring for the presence of marine mammals using available sensors such as passive acoustics and aerial observation, and powering down sonar transmission levels, or curtailing sonar use, when in proximity to marine mammals.

Regulations published as part of the Big Three authorizations also include “adaptive management” requirements, which will help ensure that the protective measures and the monitoring protocols are effective, while taking into account their effect on the quality of sonar training. Pursuant to the regulations, the Navy will develop and implement monitoring plans for each area; Navy marine mammal research will be focused to address particular unknowns; and the Navy will submit to NMFS various post-exercise reports. Each year, NMFS and the Navy will review information from these sources and others, and if necessary, adjust the area-specific protective measures. Beginning in January 2010, and through January 2013, NMFS will issue annual re-authorizations for each area, specifying the protective measures to be implemented over the next 12 months.

substantial amount of effort. It is important to recognize the environmental benefits of this effort. For the SOCAL and AFAST study areas, NMFS anticipates that there will be no (zero) physical injury to a marine mammal during sonar training over a five year period, thanks to the use of the prescribed protective measures. Within the HRC area, physical injury of no more than 110 marine mammals is anticipated over a five-year period, roughly 22 per year. While the Navy strives to prevent any injury to marine mammals, it is important to keep these numbers in perspective: Legally authorized commercial fishing in U.S. waters causes more than 3,000 marine mammal deaths per year.



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Even as the effort to implement the Big Three regulations proceeds, the Navy is working to complete environmental planning, authorization and consultation processes for the remaining ten areas. Although the intensity of training activities in these remaining areas does not approach that of the Big Three, completing nine of these efforts in quick succession during 2009, and one in 2010, represents a major challenge. Once the process is complete, in all likelihood annual re-authorizations will be needed for each area.

Shortly after completion of these environmental compliance efforts for the 13 ranges and OPAREAs, the Navy will need to begin the process all over again, for each area. This is because it takes several years to complete these processes, and certain required overarching environmental authorizations, under the law, cannot be issued for longer than five years. Thus, environmental monitoring, reporting and analysis for ranges and OPAREAs will remain a major focus for the indefinite future for the Chief of Naval Operations (CNO) Environmental Readiness Division, the Navy Secretariat, and the action proponents, namely the Pacific Fleet, Fleet Forces Command, and the Naval Sea Systems Command.

As described above, environmental compliance in Navy sonar training has required, and will require, a very

In addition to completing the Big Three environmental processes in January 2009, in that same month the Navy issued policy geared to ensure environmental responsibility in sonar training well beyond established ranges and OPAREAs. CNO Message 221440Z January 2009 mandated the use of 29 protective measures during MFAS use in U.S. waters, on the high seas, and within foreign exclusive economic zones. These measures were developed in concert with NMFS, and form the basis of the protective measures now in effect for MFAS activities in the Big Three. In the near future these measures will be incorporated into the Navy's Protective Measures Assessment Protocol (PMAP), a CD-based tool which provides commanding officers with location-specific protective measures for various Navy training activities, including the use of MFAS.

For the reasons discussed above, and many others, 2009 will be a busy year for the Navy environmental program. I look forward to partnering with the Department's new political leadership, federal and state agencies, environmental NGOs, and the Navy chain of command to ensure sustained environmental compliance in worldwide Navy activities afloat and ashore. ⚓

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